

PC43	EC 1	ASTVIHYEIPEREK-----GFAVGNVVANL--GLDLGSLSA--
	EC 2	PTQEMKLEISEAVAP-----GTRFPLESAH---DPDLGSNSL---
	EC 3	NQSLYRARVPGGCTS-----GTRVVQVLAT---DLDEGPNGE--
	EC 4	TVTSVYSPVPEDAS-----GTVIALLSVT---DLDAGENGL--
	EC 5	SQSSYDVYIEENNLP-----GAPILNLSVM---DPDAPONAR--
	EC 6	LYPRPGGSSVEMLPRTSA-GHLVSRVVGW---DADAGHNAW--
PC42	EC 1	VPEEQPPNTLI-----GSL-----AADYGFPDVG-
	EC 2	ASPVITLAIPENTNI-----GSLFPIPLAS---DRDAGPNGV--
	EC 3	ERPSYEAELSENSPI-----GHSVIQVKAN---DSDQGANAEE--
	EC 4	EIRGIGLVTHQDGMANISEDVAEETAVALVQVSDRDEGENAA--
	EC 5	TQSVTEVAFPENNKP-----GEVIAEITAS---DADSGSNAE--
	EC 6	MLSGYNFVSMENMPA-----LSPVGMVTVI---DGDKGENAO--
	EC 7	TAPSNKSHKLLTPQTRL---GETVSQVAAE---DFDSGVNAE--
FAT	EC18	EDTVYSFDIPENAQR-----GYQVGQIVAR---DADLGQNAQ--
N-CAD	EC 1	DWVIPPINLPENSRG-----PFPQELVRIRS---DRDKNLSLRYT
	EC 2	LHQVWNGTVPEGSKP-----GTYYMTVTAI---DADDPNALNGM
	EC 3	TAMTFYGEVPENRVD-----IIIVANLTVT---DKDQHPHPAWN
	EC 4	APNPKIIRQEEGLHA-----GTMLTTFTAG---DPDRYMQQN--
	EC 5	LPQEAETCETPDNPSINITIAL-----DYDIDPNAGP-
MOTIF		*****V*EN***-----GT*v**v*A*---D*D*G*N*---

FIGURE 1A

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PC43  EC 1  RRFVVGASRR-----FFEVRNRET-----GEMFVNDR-----
      EC 2  QTYELSRNEY-----FALRVOTREDSTKYAELVLER-----
      EC 3  IIYSFGSHNRAGVRQL--FALDLVT-----GMLTIKGR-----
      EC 4  VTCEVPPGLP-----FSLTSSLKNYFTLKTSAD-----
      EC 5  LSFFLLEQGAETGLVGRYFTINRDN-----GIVSSSLVP-----
      EC 6  LSYSLFGSPNQSL-----FAIGHT-----GOISTARPV-----

PC42  EC 1  HLYKLEVGAP-----YLRVDGKT-----GDIFTTETS-----
      EC 2  ASYELQVAED-----QEEKQPQLIVMGN-----
      EC 3  IEYTFHOAPEVVRL---LRDRNT-----GLITVOGP-----
      EC 4  VTCVVAGDVP-----FOLROASETGDSKKKYFLQTTTP
      EC 5  LVYSLEPEPAKGL-----FTISPET-----GEIQVKTS-----
      EC 6  VQLSVEODNGD-----FVIQNGT-----GTILSSLS-----
      EC 7  LIYSIAGGNPYGL-----FOIGSHS-----GAITLEKE-----

FAT   EC18  LSYGVVSDWANDV-----FSLNPQT-----GMLTLTAR-----

N-CAD EC 1  VTGPGADQPPTGI-----FIINPIS-----GQLSVTKP-----
      EC 2  LRYRIVSOAPSTPSNM-FTINNET-----GDIITVAAG-----
      EC 3  AVYRISGGDPTGR-----FAIQIDPNSND-GLVTVVVKP-----
      EC 4  IRYTKLSDPAN-----WLKIDPVN-----GOITTIIV-----
      EC 5  FAFDLPLSPVTIKRN---WTITRLN-----GDFAQLNLK-----

MOTIF      I*0*I*****0*I***T-----G*I*T***-----

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FIGURE 1B

PC43	EC 1	LDRLELCGTLPSCTVTLELVENP-----	LELFSVEVVIQDINDNNPAF
	EC 2	LDREREPSLQLVLTALDGGTPAL-----	SASLPIHIKVLVDANDNAPVF
	EC 3	LD FEDTKLHEIYIOAKDKGANPE-----	GAHCKVLVEVVDVNDNAPEI
	EC 4	LDRETVPENLSITARDAGTPSL-----	SALTIVRVQVSDINDNPPQS
	EC 5	LDYEDRRREFELTAHISDGGTPVL-----	ATNISVNI FVTD RNDNAPQV
	EC 6	ODTDSPRQTLTVL-IKDN GEP SLSTATLTVSVTEDSPEARAEFP SG SAPREQKN	
PC42	EC 1	IDREGLRECONQLPGDPCILEFEVSIIDL VQNAS--	PRLLEGQIEVODINDNTPNF
	EC 2	LD RERWDSYDLTIKVODGGSPPR-----	ATSALLRVTVLDTNDNAPKF
	EC 3	VDREDLSTLRF SVLAKDRGTNPK-----	SARAQVVVTVKMDNDNAPTI
	EC 4	LDY EKVKDYTIEIVAVDSGNPPL-----	SSTNSLKVQVVDVNDNAPVF
	EC 5	LDREQRESYELKVVAADRGSPSL-----	QGTATVLVNVLD CNDNDPKF
	EC 6	FDREQQSTYTFOLKAVDGGVPPR-----	SAYVGTINVL DENDNAPYI
	EC 7	IERRHHGLHRLVVKVSDRGKPPRYGTALVHLVYVNETLANRTLLETLLGHSLDTPLD	IDIAGDPEYERSKQRGN
FAT	EC18	LDYEEVQHYILIVQAODNGQPSL-----	STTITVYCNVLDLNDNAPIF
N-CAD	EC 1	LDREQIARFHLRAHAVDINGNQV-----	ENPIDIVINVIDMNDNRPEF
	EC 2	LDRENVQQYTLIIQATDMEGITYGL-----	SNTATAVITVTDVNDNPPPEF
	EC 3	IDFETNRMFVLTVAAENQVPLAKGIQHPP-----	QSTATVSVTVIDVNE-NPYF
	EC 4	LDRESPNVKNNIYNATFLASDNGIPPM-----	SGTGTLQIYLLDINDNAPQV
	EC 5	IKFLEAGIYEVPIIITDSGNPPKSNIS-----	ILRVRCQCD FNGDCTDVDR
MOTIF		LDRE****O*L*v*A*D*G*P**-----	***T*TV*v*v*D*NDNAP*F

FIGURE 1C